

STATE OF NEW MEXICO NEW MEXICO WATER QUALITY CONTROL COMMISSION

In the Matter of: PROPOSED AMENDMENTS TO STANDARDS FOR INTERSTATE AND INTRASTATE WATERS, 20.6.4 NMAC

No. WQCC 20-51 (R)

AMIGOS BRAVOS' PROPOSED STATEMENT OF REASONS

In accordance with 20.6.304 NMAC and order of the Hearing Officer at the close of the hearing, Amigos Bravos files its Proposed Statement of Reasons in support of its Proposed Amendments to 20.6.4 NMAC [AB Ex. 24].

PROPOSED FINDINGS OF FACT

I. AMIGOS BRAVOS' EXPERT WITNESSES

- 1. Amigos Bravos is a non-profit water conservation organization that has worked for 30 years to protect and restore the waters of New Mexico. AB Ex. 3 at 1. Amigos Bravos presented four expert witnesses at hearing: Rachel Conn; Jamie DeWitt, Ph.D., DABT; David Hope; and Ann Bailey M.S.
- 2. Ms. Conn is Deputy Director of Amigos Bravos. She has a B.A. in Environmental Biology from Colorado College. For the past 21 years, she has worked for Amigos Bravos on New Mexico water quality policy and protection where she directs projects in Amigos Bravos' three program areas: protecting watersheds and developing watershed policy, holding polluters accountable, and building a water protection movement for the future. Ms. Conn works with New Mexico communities to use the Clean Water Act ("CWA") and New Mexico Water Quality Act ("WQA") to protect and restore their rivers, streams, and other waters. She gives training around the state on water quality standards, Total Maximum Daily Loads, National Pollutant Elimination System permits, Outstanding National Resource Waters ("ONRWs"), and other

CWA and WQA topics. She led a surface water quality monitoring program in Northern New Mexico that has gathered water quality data from seven streams annually for the past 14 years. She has served on the Advisory Board of the national Clean Water Network for nine years, where she helps guide national CWA advocacy. And she has provided technical testimony related to CWA and WQA requirements before the Water Quality Control Commission ("Commission") on numerous occasions, including during the prior three Triennial Reviews, as well as the rulemakings designating and promulgating rules governing ONRWs. *Id.* at 1-2. Her resume is Amigos Bravos' Exhibit 2.

- 3. Dr. DeWitt is an Associate Professor in the Department of Pharmacology and Toxicology of the Brody School of Medicine at East Carolina University ("ECU"), where she teaches graduate, medical, and dental students and manages a research laboratory that conducts toxicological research on the effects of environmental contaminants on the immune system, including the effects of per- and polyfluoroalkyl substances ("PFAS"). She is also an Adjunct Associate Professor in the Department of Biological Sciences at North Carolina University. AB Ex. 8 at 1.
- 4. Dr. DeWitt received Bachelor of Science degrees in Biology and Environmental Science from Michigan State University and Doctor of Philosophy degrees in Environmental Science and Neural Science from Indiana University-Bloomington. She completed postdoctoral training in Environmental and Ecotoxicology at Indiana University-Bloomington and in Immunotoxicology at the National Health and Environmental Effects Research Laboratory at the United States Environmental Protection Agency ("EPA") through a cooperative training agreement with the University of North Carolina at Chapel Hill. At EPA, she evaluated the immunotoxicity of organotin compounds used in polyvinylchloride pipes and of

perfluorooctanoic acid ("PFOA") as an emerging contaminant in drinking water supplies. She is a Diplomate of the American Board of Toxicology. *Id*.

- 5. Dr. DeWitt has written or reviewed documents related to PFAS from EPA, the International Agency for Research on Cancer of the World Health Organization, the U.S. National Toxicology Program, and the U.S. Agency for Toxic Substances and Disease Registry. She was part of a steering committee to organize a workshop in 2017 entitled "International Workshop Supporting the Dialogue Between Science and Policy on Per- and Polyfluoroalkyl Substances (PFAS)" and is part of a group known as the Global PFAS Science Panel that grew out of that workshop. She was a member of the Science Advisory Workgroup to the Michigan PFAS Action Response Team. She was appointed as a member of the North Carolina Secretaries Science Advisory Board, charged with advising the North Carolina Departments of Environmental Quality and Health and Human Services with toxicological effects of contaminants and levels of control necessary for protection of human health and the environment. She is a member of the Tennessee PFAS External Advisory Group to the Departments of Environment and Conservation and Health, charged with informing the state about PFAS. She has testified three times on PFAS toxicity before subcommittees of the U.S. House of Representatives. *Id.* at 2.
- 6. Dr. DeWitt co-authored nearly 80 scientific publications, including 16 primary research articles related to PFAS toxicity (first or senior author of 10), 14 review articles/commentaries on PFAS toxicity, and two book chapters related to PFAS immunotoxicity, and edited one of the first comprehensive texts on the toxicity of PFAS. *Id.* at 2-3. Dr. DeWitt's curriculum vitae is Amigos Bravos' Exhibit 8.

- 7. David Hope has been the Chief Executive Officer of Pacific Rim Laboratories since 2003. Pacific Rim Laboratories is one of the most diversified high resolution mass spectrometry labs in North America. It is accredited by the International Organization for Standardization 17025 and the Washington State Department of Ecology. He received a Bachelor of Science with a Chemistry Major from the University of Victoria in 1980. AB Ex. 19 at 1-2. Mr. Hope is an expert in sampling methods for polychlorinated biphenyls or "PCBs." He began as a bench chemist in 1980, and has been analyzing for PCBs since the mid-1980's. He has been invited to speak at international conferences and workshops on PCBs and his laboratory has won international contracts to analyze for PCBs and other contaminants. Between 2016 and 2020, his lab averaged 1210 PCB samples per year, of which 383 were water samples. *Id.* at 1-3. His curriculum vitae is Amigos Bravos' Exhibit 18.
- 8. Ann Bailey, M.S., is also an expert in sampling methods for PCBs. She graduated with a B.A. in biology from University of Oregon in 1972, and with a Master's in Environmental Studies from the University of Montanan in 1976, focusing on chemical contaminant measurements. She first worked as a bench chemist performing a wide range of analyses, and then worked for four years as technical director of a commercial testing laboratory in Seattle, Washington. In 1983, she founded an environmental consulting firm, which included setting up a field PCB testing laboratory utilizing equipment and methods similar to EPA Method 608 for PCBs. In the 1990s, she provided quality assurance oversight of laboratories performing both Aroclor and PCB congener analyses for a number of environmental investigations. The past 20 years, she has performed historical data review of analytical test results throughout the United States for a number of ecological assessments, including the Pecos Mine in New Mexico. She has been the Quality Assurance Coordinator for a number environmental investigations,

including for the Los Alamos National Laboratory ("LANL") Natural Resource Damage Assessment. AB Ex. 22 at 1. Her curriculum vitae is Amigos Bravos' Exhibit 21.

II. THE COMMISSION SHOULD ADOPT A CLIMATE CHANGE OBJECTIVES SECTION AT 20.6.4.6.C NMAC AND DEFINITION AT 20.6.4.7.C(4) NMAC

- A. The Commission Should Clarify and Strengthen NMED's Proposed

 Language to Include Climate Change as an Objective of the Water Quality

 Standards
- 9. The New Mexico Environment Department ("NMED") has proposed language to include climate change in the Objectives section of 20.6.4 NMAC.
 - 10. NMED proposes:

20.6.4.6 OBJECTIVE:

. . .

D. These surface water quality standards serve to respond to the inherent threats of climate change and provide resiliency for the continued protection and enhancement of water quality.¹

NMED Ex. 110 at 1.

- 11. Amigos Bravos supports including climate change in the Objective section, and proposes language to clarify and strengthen that section.
 - 12. Amigos Bravos proposes the following:

20.6.4.6 OBJECTIVE:

. . .

espond to the threats of climate change to water quality and provide resiliency to protect and enhance water quality. The quality of New Mexico surface waters is being affected by climate change. New Mexico's climate is getting hotter and drier, resulting in earlier springs, hotter summers, and less predictable winters. New Mexico is experiencing more intense droughts and a greater proportion of precipitation falling as rain instead of snow. Snowpack is shrinking and earlier snowmelts contribute to lower stream flows at critical times of the year when the reduced availability of water has greater environmental consequences. Increased

¹ Amigos Bravos' proposed changes to the regulations are shown in <u>blue underline</u> and red strikethrough; NMED's proposed changes are in red; and the existing regulations are in black.

water temperatures resulting from increased air temperatures tend to lead to lower levels of dissolved oxygen in water, resulting in increased stress on the fish, insects, crustaceans and other aquatic animals that rely on oxygen. More intense precipitation events and increased evaporation rates lead to increased runoff and more pollution, including increased nutrients sediment, and salt that wash into surface waters. Development of New Mexico surface water quality standards should take into account the importance of protecting of water quality in light of climate change.

AB Ex. 24 at 1.

- 13. Amigos Bravos' proposal:
- Clarifies that a purpose of the water quality standards is to respond to and protect against the threats of climate and to provide resiliency to enhance water quality, and
- Identifies documented threats to New Mexico's surface waters from climate change.
- 14. NMED does not support language identifying the documented threats of climate change to surface waters, arguing that identifying the threats is not an objective and the science on climate change is evolving. NMED Ex. 106 at 9-10.
- 15. However, the science underlying the threats identified in Amigos Bravos' proposed language is well-established and is accurate. AB Ex. 3 at 2-3; 1 Tr. 187:3-9.² In fact, Shelley Lemon, NMED Surface Water Quality Bureau Chief, cites the same threats in her rebuttal testimony. NMED Ex. 106 at 13.
- 16. Science is constantly evolving with respect to all aspects of the Commission's standards, which is why the Commission holds a Triennial Review. 1 Tr. 187:3-9; AB Ex. 3 at 2-3. Therefore, the fact that the science may evolve or change in the future is not a good reason

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² Citation to the transcript of proceedings in this matter will include citation to the volume number, page number, and line number. For example, citation to volume 1, page 1, lines 1 through 10 of the transcript would appear as: 1 Tr. 1:1-10.

not to include reference to the current scientific consensus on the threats that New Mexico surface waters now face and will continue to face as a result of climate change.

- 17. Amigos Bravos' language identifying documented threats to surface waters from climate change is intended to provide context how climate change is impacting New Mexico's waters. 1 Tr. 187:10 to 1:188:4. Given the seriousness of the threat that climate change poses, Amigos Bravos' proposed language provides a more accurate assessment, based on the scientific evidence, how a changing climate is impacting our surface waters and provides better guidance how the standards should be developed to take climate change into account. AB Ex. 3 at 3-4.
- 18. The San Juan Water Commission ("SJWC") does not dispute the existence of climate change and is concerned "about the future because of impacts of climate change, especially from the impacts of worsening drought." 1 Tr. 223:14-21.
- 19. SJWC nonetheless opposes including climate change in the Objectives section claiming NMED did not provide an adequate explanation in its direct or rebuttal testimony why climate change "should be singled out and elevated above all the other sources of impairment"
- 20. NMED and Amigos Bravos, however, set forth the evidence, based on scientific consensus, that climate change poses an "existential threat." NMED Ex. 106 at 13.
- 21. Ms. Lemon described the particularized threats of climate change to the state's surface waters including increases in water temperature and decreases in dissolved oxygen that stress aquatic life, the impact to surface water flows that are necessary for aquatic life and the outdoor recreation economy, and the increase in wildfires resulting in increased sediment and nutrient transport in runoff. NMED Ex. 106 at 13.

- 22. Likewise, Ms. Conn described how New Mexico is the sixth fastest warming state in the nation, that this trend is expected to continue through 2100, and how these increased temperatures "are already having outsized impacts on New Mexico's surface waters." AB Ex. 3 at 2. She outlined with particularity the documented impacts that climate change is having in New Mexico based on national and international studies, impacts Amigos Bravos proposes be identified in the Objectives section of the water quality standards, for the reasons stated above. *See* AB Ex. 3 at 2-3.
- 23. A threat of this nature and magnitude to our surface waters merits recognition in the Commission's regulations.
 - B. The Commission Should Identify in the Definition of Climate Change that Human Activity Is the Primary Cause of Climate Change
- 24. NMED proposes to include the following definition of climate change in the water quality standards.
 - C. Terms beginning with the letter "C".

. . .

- (4) "Climate change" refers to any significant change in the measures of climate lasting for an extended period of time, typically decades or longer, and includes major changes in temperature, precipitation, wind patterns or other weather-related effects. Climate change may be due to natural processes or human-caused changes of the atmosphere, or a combination of the two.
- 25. NMED's proposed definition implies that the causes of climate change natural processes and human activities are equivalent. However, this is not accurate, and the definition as written is misleading.
- 26. It is the scientific consensus that climate change is primarily human caused, as Ms. Conn pointed out in her testimony. According to the U.S. Global Research Program, "Earth's climate is now changing faster than at any point in the history of modern civilization, primarily as a result of human activities. The Intergovernmental Panel on Climate Change finds

that, "Human influence on the climate system is clear, and recent anthropogenic emissions of green-house gases are the highest in history." The Union of Concerned Scientists concludes that, "Scientists worldwide agree that global warming is happening, and that human activity causes it." Multiple independent lines of evidence and the vast body of peer-reviewed science demonstrate that the greenhouse gases emitted by human activities are the primary driver of climate change. AB Ex. 3 at 6; *see also* AB Ex. At 12.

- 27. NMED states that its proposed definition "is taken almost directly from EPA's definition of climate change." NMED Ex. 1 at 12.
- 28. However, EPA's definition of climate change does **not** include language about sources of climate change proposed by NMED. NMED added that language. As found in NMED's Exhibit 33 and on EPA's website, EPA's definition is:

Climate change refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.

AB Ex. 11 at 11; NMED Ex. 33.

- 29. EPA, however, recognizes that climate change is primarily human-caused.
- 30. On the same page of the EPA website referred to by NMED, there is a large header with a link stating, "Humans are largely responsible for recent climate change." AB Ex. At 11.
- 31. To make sure the Commission's definition of climate change is accurate and not misleading, Amigos Bravos proposes the following addition to NMED's proposed definition:
 - C. Terms beginning with the letter "C".

. .

(4) "Climate change" refers to any significant change in the measures of climate lasting for an extended period of time, typically decades or longer, and includes major changes in temperature, precipitation, wind patterns or other

weather-related effects. Climate change may be due to natural processes or human-caused changes of the atmosphere, or a combination of the two. <u>Humans are largely responsible for recent climate change.</u>

AB Ex. 24 at 2.

- 32. The definition of climate change has implications for interpretation and implementation of the Commission's water quality standards.
- 33. For example, when NMED interprets terms like "natural background" and "natural causes" in the water quality standards, it should rely on the best science available to determine whether conditions that affect water quality, such as increases in temperature, are attributable to natural variability or human-caused climate change. AB Ex. 3 at 6.
- 34. Similarly, the current standards have no mechanism in place to document or track how a changing climate is affecting the hydrology of our waterways. Stream segments are identified as perennial, intermittent, and ephemeral. A stream segment historically could be perennial, but then become intermittent and the standards for that segment would be downgraded automatically without any analysis why the flow regime has changed and, in particular, without analysis whether the change is due to climate change and if any mitigation actions could be taken. AB Ex. 11 at 9.
- III. THE COMMISSION SHOULD ADOPT A DEFINITION OF CONTAMINANTS OF EMERGING CONCERN AT 20.6.4.7.C(7) NMAC AND AUTHORIZE MONITORING OF CECS AT 20.6.4.14.F NMAC
 - A. The Commission Should Add a Definition for CECs
 - 1. <u>Contaminants of emerging concern is a well-established regulatory</u> category and should be included in the water quality standards
- 35. NMED proposes to add a definition of contaminants of emerging concern or "CECs" to the water quality standards.

- 36. Amigos Bravos supports adding a definition of CECs, and recommends two amendments to NMED's proposed definition.
- 37. Amigos Bravos proposes adding per- and polyfluoroalkyl substances or "PFAS" as examples of CECs. **NMED supports this addition.** NMED Ex. 107 at 3.
- 38. Amigos Bravos proposes adding language to clarify that CECs and "toxic pollutants" are two separate regulatory categories. NMED objects to this proposal. *Id.*
 - 39. Amigos Bravos proposes the following:

20.6.4.7 DEFINITIONS

. . .

C. Terms beginning with the letter "C".

. .

(7) "Contaminants of emerging concern" or "CECs" refer to water contaminants including, but not limited to, per- and polyfluoroalkyl substances, pharmaceuticals and personal care products that may cause significant ecological or human health effects at low concentrations and are not already considered "toxic pollutants" by the department. CECs are generally chemical compounds that, although suspected to potentially have impacts, may not have regulatory standards, and the concentrations to which negative impacts are observed have not been fully studied.

AB Ex. 24 at 3.

- 40. CECs are generally chemical compounds that, although suspected potentially to have impacts, may not have regulatory standards, and the concentrations at which negative impacts are observed have not been fully studied. AB Ex. 9 at 8.
- 41. CECs are a widely accepted group of potentially harmful contaminants, including by EPA, and PFAS are recognized as CECs, including by EPA. AB Ex. 11 at 6.

2. <u>PFAS are potentially harmful water contaminants that should be</u> included in the CEC definition

- 42. Dr. DeWitt, whose expertise in PFAS at the hearing was unparalleled, provided extensive and detailed testimony on the chemical composition, properties, and toxicity of PFAS compounds, of which there are nearly 10,000. AB Ex. 9 at 3-7.
- 43. In the vast majority of cases, PFAS are either non-degradable or degrade to terminal products that are still PFAS. A consequence of their extensive use and resistance to degradation is their persistence in the environment and, when combined with the potential for many PFAS to bioaccumulate or move into living organisms from the environment, they are detectable in tissues and blood of wildlife and humans. A Centers for Disease Control and Prevention study reported detectable concentrations of a subset of PFAS in the serum of 97% of surveyed individuals, indicating widespread human exposure. *Id.* at 3.
- 44. NMED has identified PFAS contamination as a top priority in the state. According to NMED: "PFAS are known as 'forever' chemicals because they do not easily degrade in the environment due to their chemical properties. Thus, PFAS can accumulate over time in soil, water, and living organisms and have been found in water sources around the world." AB Ex. 3 at 8.

45. According to Dr. DeWitt:

PFAS that have been studied for their toxicity induce a wide variety of adverse health outcomes in experimental animal models. Epidemiological studies, or studies of people that have been exposed to PFAS through their occupations or from environmental sources such as drinking water, link PFAS exposure to similar adverse health outcomes. These toxicological and epidemiological studies indicate that exposure to PFAS poses a hazard to human health.

AB Ex. 9 at 5.

46. NMED observes that, "research indicates that some PFAS may affect reproductive health, increase the risk of some cancers, affect childhood development, increase cholesterol levels, affect the immune system, and interfere with the body's hormones." AB Ex. 3 at 8.

47. According to Dr. DeWitt:

In light of the prevalence of PFAS, their persistence in environmental media, and their potential for harm to human health and the environment, it is appropriate to highlight these compounds as examples of CECs in NMED's regulatory definition.

AB Ex. 9 at 8.3

3. CECs and toxic pollutants are distinct regulatory concepts

- 48. CECs and "toxic pollutants" carry two distinct definitions and, therefore, it is appropriate to add clarifying language to NMED's proposed definition for CECs.
- 49. Under NMED's proposed definition, CECs are compounds that, while suspected to have impacts, "may not have regulatory standards," and require further study.
- 50. Toxic pollutants, on the other hand, are pollutants that are documented to cause harm at certain levels; may not be discharged into New Mexico surface waters at concentrations that harm to aquatic life, wildlife, and humans; and therefore do have regulatory standards. *See* 20.6.4.7.T(2), -13.F NMAC.
- 51. Dr. DeWitt supports adding a new definition for CECs, including PFAS as an identified example of CECs, and making the distinction between CECs and toxic pollutants. AB 17 at 1.

³ Dr. DeWitt has identified nine PFAS for which there is sufficient information to categorize them as "toxic pollutants" under 20.6.4.7.T(2) NMAC. AB Ex. 9 at 7-8. Discussion of her opinion is set forth in Section IV below.

- 52. NMED opposes making the distinction between CECs and toxic pollutants in the definition of CECs because, according to Ms. Lemon, "some CECs meet the definition for 'toxic pollutants' in 20.6.4.7(T)(2) NMAC." NMED Ex. 107 at 3.
- 53. However, this is an unconvincing interpretation of the definitions of CECs and toxic pollutants. Under NMED's proposed definition for CECs, not enough is known about these compounds to set regulatory standards. However, under the Commission's definition of toxic pollutants, enough is known to set regulatory standards and to ban these compounds at certain concentrations.
- 54. In the future, there may be individual CECs, such as certain PFAS and pharmaceuticals and personal care products ("PPCPs"), where there is sufficient knowledge to determine these contaminants are toxic to aquatic life, wildlife or humans in accordance with 20.6.4.13.F NAMC. If so, those constituents should be categorized as "toxic pollutants" and effluent limitations should be established. In those cases, it would no longer be appropriate to consider them of "emerging concern." AB Ex. 11 at 7-8.

4. <u>LANL and SJWC's opposition to adding a definition for CECs lacks</u> merit

- 55. Triad National Security, LLC, and the U.S. Department of Energy (collectively "LANL") and SJWA object to adding a definition for CECs based in large measure on NMED's proposal to add CECs to the narrative standard for toxic pollutants at 20.6.4.13.F(1) NMAC. They object on the ground that too many unidentified constituents could be banned. Because they object to including CECs in the narrative standard for toxic pollutants, they object to adding a definition for CECs because there would then be no other reference in the regulations to CECs.
- 56. While Amigos Bravos does not support adding CECs to the narrative standard for toxic pollutants, for the reasons stated above, Amigos Bravos does propose adding a provision in

the water quality standards authorizing NMED to require discharges to monitor CECs. *See* AB Ex. 24 at 3.

57. If the Commission amends the regulations to include authorization to monitor CECs, the water quality standards would have a regulatory reference to CECs, defeating LANL and SJWC's objection to adding a definition.

B. The Commission Should Give NMED Express Authority to Require Dischargers to Monitor for CECs

1. NMED does not object to Amigos Bravos' proposal

58. Amigos Bravos proposes a provision that would give NMED express authority to NMED to require dischargers who have federal permits to monitor for CECs. Amigos Bravos proposes the following:

20.6.4.14 SAMPLING AND ANALYSIS

. . .

F. <u>CEC monitoring:</u> The department may require monitoring, analysis, and reporting of a contaminant of emerging concern as a condition of a federal permit under Section 401 of the federal Clean Water Act.

AB Ex. 24 at 3.4

- 59. **NMED does not object to Amigos Bravos' proposal** (although it believes that it currently has the legal authority to require monitoring for CECs). NMED Ex. 106 at 19-20.
- 60. According to Dr. DeWitt, NMED should have the authority to require dischargers to establish a baseline for and monitor CECs in federal permits. By definition, CECs are contaminants that may cause significant harm to human or ecological health, even at low concentrations, and require further study. Therefore, NMED should have the authority to study

⁴ At NMED's suggestion, Amigos Bravos titled this subsection "Effluent Characterization" in our Exhibit 24. *See* NMED. Ex. 106 at 20-21. However, during the hearing, NMED objected to the title. Amigos Bravos suggests titling the section "CEC monitoring."

these compounds and add to the science community's body of knowledge by requiring dischargers to establish baseline and monitor and assess. Monitoring and characterization data can further our understanding of the prevalence of these compounds in surface waters, identify levels of PFAS to which humans and other living organisms are exposed, and provide data for development of mitigation and management strategies that can potentially prevent harm to human and ecological health. AB Ex. 9 at 9.

2. CECs, including PFAS, have been found in New Mexico waters

- 61. PFAS have been detected in New Mexico ground and surface waters at numerous locations. AB Ex. 3 at 8-9.
- 62. PFAS contamination of groundwater has been found at Cannon and Holloman Air Force Bases. Contamination at Cannon Air Force Base was monitored at levels more than 370 times greater than EPA's lifetime health advisory. Nearby private drinking wells are also contaminated. Near Holloman, PFAS were found at levels up to 1,294,000 parts per trillion more than 27,000 times the lifetime advisory level. The water utility for Clovis has detected PFAS in municipal drinking water wells. AB Ex. 3 at 8.
- 63. PFAS have been detected in New Mexico's surface waters. An August-September 2020 joint U.S. Geological Survey and NMED study detected PFAS in numerous New Mexico river systems including the Rio Grande, Gila, Canadian, Animas, Pecos, Rio Puerco, and San Juan rivers. AB Ex. 3 at 9; AB Ex. 4.
- 64. NMED is currently directing sampling for PFAS in 19 New Mexico counties.

 This sampling effort, which started in mid-2020 and continues through mid-2021, focuses on multiple ground and surface water supplies. According to then NMED Water Protection Division

Director Rebecca Roose (now Deputy Secretary), "The first step toward addressing PFAS contamination in New Mexico is finding out where these chemicals are." AB Ex. 3 at 9.

- 65. Other CECs including PPCPs have been detected in New Mexico's surface waters. In 2018, a University of Texas study detected over 40 PPCPs including carbamazepine, erythromycin, gemfibrozil, ofloxacin, sulfamethoxazole, and trimethoprim in the Rio Grande and documented negative impacts to aquatic life from the detected concentrations. A 2014-2017 Amigos Bravos educational monitoring project detected 17 PPCPs in the Rio Grande in the South Valley. AB Ex. 5. NMED found PPCPs in several wastewater treatment effluent streams in northern New Mexico. AB Ex. 6; AB Ex. 3 at 9-10.
- 66. In light of the prevalence of CECs in New Mexico surface waters, NMED should have the express authority to require dischargers to monitor for them.

3. <u>LANL objects to monitoring for CECs even though PFAS have been detected in its surface waters</u>

- 67. LANL objects to Amigos Bravos' proposal to give NMED authority to require dischargers with federal permits to monitor for CECs, LANL Ex. 63 at 15, even though PFAS have been detected in its surface waters.
- 68. NMED has asserted its regulatory authority to condition two LANL federal permits to require LANL to monitor for PFAS. AB Ex. 11 at 3-4.
- 69. On November 30, 2020, pursuant to the Clean Water Act, the Water Quality Act, and the Commission's regulations, NMED issued state certifications for two National Pollutant Discharge Elimination System ("NPDES") permits for LANL: Industrial Wastewater NPDES Permit No. NM0028355 ("LANL Wastewater Permit") [AB Ex. 12] and Individual Stormwater NPDES Permit No. NM0030759 ("LANL Stormwater Permit") [AB Ex. 14]. AB Ex. 11 at 3.

- 70. NMED conditioned both the LANL Wastewater Permit and the Stormwater Permit on monitoring 18 PFAS analytes annually at locations where PFAS are detected above the New Mexico screening level. AB Ex. 12 at 2-5; AB Ex. 14 at 18-19.
- 71. LANL has objected to monitoring for PFAS, and has appealed these monitoring conditions in both permits to the NMED Secretary. AB Ex. 11 at 3-4.

4. <u>LANL's objections to Amigos Bravos' CEC monitoring proposal have</u> no merit

- 72. LANL opposes authorizing NMED to require dischargers to monitor CECs on two grounds: LANL witness John Toll argues that (1) EPA regulations require dischargers test using a sampling method approved pursuant to 40 CFR Part 136 "Part 136 Methods" (or that a state obtain approval for an "alternative test procedure" or "ATP) and no Part 136 Method is approved for PFAS, and (2) NMED does not have authority under the Clean Water Act to require monitoring of CECs. LANL Ex. 63 at 14-18.
- 73. Mr. Toll, who is not a lawyer, is incorrect that only Part 136 Methods (or an ATP) are the only sampling methods allowed under a federal Clean Water Act permit. This issue is discussed in detail in Section VI below, opposing LANL's proposal at 20.6.4.14.A NMAC to restrict sampling methods to Part 136 methods for purposes of determining compliance with a federal permit.
- 74. Mr. Toll argues without explanation that Amigos Bravos' proposal "would fall outside NMED's authority under Section 401 of the Clean Water Act and the WQCC regulations on 401 certifications" LANL Ex. 63 at 18, ll. 9-11.
- 75. First, even if the Amigos Bravos' CEC monitoring proposal fell "outside the WQCC regulations" which it does not the Commission is free to amend its regulations. In

fact, this Triennial Review is a process to do exactly that -- amend and update the regulations to ensure that New Mexico's surface waters are adequately protected.

- 76. Second, Amigos Bravos' proposal does not run afoul of the Clean Water Act.
- 77. The provisions in the Clean Water Act governing state certification of federal permits give states broad authority to impose conditions in EPA-issued permits. Specifically, the act authorizes a certifying state "to review the manner in which the facility or activity [that is discharging] shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated." 33 USC § 1341(a)(4) (emphasis added).
- 78. Certifying states, therefore, have authority under the Clean Water Act to impose their own "limitations or other applicable water quality requirements", which include requirements to monitor for suspected contaminants.
- 79. This same section on state certification makes it clear that, "Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements." 33 USC § 1341(b) (emphasis added). Again, this would include state requirements for monitoring for suspected contaminants.
- 80. LANL Exhibit 85, introduced by Mr. Toll, itself disproves Mr. Toll's claim that states do not have authority to require monitoring for CECs, specifically PFAS.
- 81. LANL Exhibit 85 is a November 11, 2020 memorandum from an EPA Assistant Administrator to all Regional Administrators and all 10 EPA Regions entitled, "Interim Strategy for Per- and Polyfluoroalkyl Substances in Federal Issued National Pollutant Discharge Elimination System Permits."

- 82. The memorandum sets forth recommendations from an EPA workgroup "charged with exploring options on how to address PFAS in EPA-issued CWA pollutants while the CWA framework for potentially regulating PFAS discharges pursuant to the NPDES program is under development." LANL Ex. 85 at 1. The workgroup examined "CWA Section 402 authorities and permit writing practices to understand where **unregulated contaminants**, such as PFAS, may fit into the permit development process; analyzing existing state-issued NPDES permits with PFAS monitoring requirements" *Id.* at 2 (emphasis added).
- 83. The workgroup, therefore, recognized that states already are requiring dischargers to monitor for PFAS even though the states may not have set water quality standards for PFAS.
- 84. The workgroup recommended "phased-in monitoring" for PFAS, and recognized that, "If no approved methods are available at 40 CFR Part 136, then the permitting authority has discretion to specify the use of suitable methods," *id.*, further discrediting Mr. Toll's claims that states are not authorized to require monitoring for PFAS and that only Part 136 Methods may be used to monitor contaminants.
- 85. EPA has established a lifetime health advisory for two PFAS: PFOA and perfluorooctane sulfonate ("PFOS") for protection of public health from ingestion of drinking water contaminated with these PFAS. This health protective value is based on the ability of PFOA and PFOS to affect babies as they develop. This value is 70 parts per trillion. AB Ex. 9 at 5.
- 85. LANL is owned and operated by the U.S. Department of Energy. LANL's argument that it cannot be required to monitor for contaminants, including PFAS, runs counter to its sister agency's established health advisory to protect developing babies.

86. The dangers of PFAS – and why it is appropriate to require monitoring for them -- is confirmed by an abundance of scientific data and information, as set forth by Dr. DeWitt. *See* AB Ex. 9 at 3-7.

IV. THE NINE PFAS IDENTIFIED BY DR. DeWITT ARE TOXIC POLLUTANTS UNDER THE COMMISSION'S DEFINITION AT 20.6.4.7.T(2) NMAC

- 87. Dr. DeWitt identified nine PFAS that are toxic pollutants under the Commission's definition at 20.6.4.7.T(2) NMAC.⁵ AB Ex. 9 at 1, 2, 7-8.
- 88. The nine are: PFOA, PFOS, perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluorobutane sulfonate (PFBS), fluorotelomer sulphonic acid 8:2 (8:2 FTS), N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA), N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA), and perfluorooctanesulfonamide (PFOSA or FOSA). *Id*.
- 89. Dr. DeWitt provided extensive scientific support for this conclusion. *See id.* at 3-7.
- 90. In summary, she believes these nine PFAS should be treated as toxic pollutants based on:
 - Epidemiological studies of people exposed to PFAS through their occupations or from environmental sources such as drinking water that indicate exposure to PFAS poses a hazard to human health. These hazards include pregnancy-induced hypertension/pre-eclampsia; increases in liver enzymes indicating liver damage; increased risk of thyroid disease; decreased antibody response to vaccines; increased risk of asthma; increased risk of decreased fertility; increases in serum lipids, particularly total cholesterol and low-density lipoprotein cholesterol; and small decreases in birth weight.

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⁵ "'Toxic pollutants' means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring." 20.6.4.7.T(2) NMAC.

- The accumulated toxicological data for the 9 PFAS that meet that definition have been summarized in documents issued by EPA, the U.S. National Toxicology Program, the International Agency for Research on Cancer, and the U.S. Agency for Toxic Substances and Disease Registry;
- The actions taken by the State of Colorado to limit these 9 PFAS in its surface waters due to their toxicity; and
- Her own extensive knowledge of and research on the toxicological effects of these and other PFAS.

Id.

- 91. No party rebutted Dr. DeWitt's conclusion.
- 92. In fact, not only did LANL witness Nancy Judd concede in her written rebuttal that, "the summaries of toxicity studies on PFAS presented by Dr. DeWitt are accurate," LANL Ex. 65 at 3, she conceded during cross-examination that the nine PFAS meet the Commission's definition of "toxic pollutant." 2 Tr. 552:15-21.

V. THE COMMISSION SHOULD REJECT LANL'S PROPOSAL AT 20.6.4.7.T(2) NMAC TO RESTRICT THE DEFINTION OF TOXIC POLLUTANTS

- 93. The Commission's current definition of "toxic pollutant" is virtually identical to the definition of "toxic pollutant" under the Clean Water Act, as Ms. Judd acknowledged. 2 Tr. 552:23 553:2; *compare* 20.6.4.7.T(2) NMAC *with* 33 USC § 1362(13).
- 94. LANL proposes to eliminate this definition, even though it mirrors the federal definition, and instead to limit the Commission's definition to EPA's list of toxic pollutants and any list the Commission promulgates in future rulemakings. *See* LANL Ex. 57 at 4.
- 95. LANL presented **no testimony** explaining why the Commission's definition, which is the same as Congress' definition, is somehow inadequate, outdated, or not based on appropriate scientific concepts.

- 96. EPA's list of toxic pollutants, however, has not been amended since 1981 and is clearly outdated. AB Ex. 17 at 11. Ms. Judd conceded, for example, that "very little" was known about the toxicological effects of PFAS in 1981. 2 Tr. 553:20-23.
- 97. The result of LANL's proposal would be to limit the list of toxic pollutants to EPA's outdated list of 65 or so compounds, *see* 40 CFR § 401.15, until such time as NMED and the Commission mustered the substantial resources, time, and effort that it would take for the Commission to promulgate a list of additional contaminants that have been identified as toxic pollutants over the last 40 years.
- 98. LANL's proposal would leave New Mexico surface waters vulnerable to discharges of **known** toxic pollutants and the serious risks they would pose to aquatic life, wildlife, and humans.
- 99. LANL's proposal is wholly inconsistent with the purpose of the Water Quality Act, which is "to prevent or abate water pollution in the state," NMSA 1978, § 74-6-4(E), and should be summarily rejected.

VI. THE COMMISSION SHOULD REJECT LANL'S PROPOSAL AT 20.6.4.14.A NMAC TO LIMIT SAMPLING METHODS TO PART 136 METHODS

A. <u>LANL's Assertion that Federal Regulations Require States to Use Part 136</u> <u>Methods (or an ATP) Is Disproven by Its Own Exhibits</u>

- 100. LANL's proposal to limit sampling methods at 20.6.4.14.A NMAC for purposes of compliance with federal permits to Part 136 Methods, LANL Ex. 67 at 13, would leave New Mexico waters vulnerable to discharges of known water contaminants, is inconsistent with the primary purpose of the Water Quality Act, and should be rejected.
- 101. The Commission's current regulations allow NMED to select from a range of authoritative sources the best sampling methods for particular contaminants, including Part 136

Methods. *See* 20.6.4.14.A NMAC.⁶ LANL proposes to restrict acceptable sampling methods to Part 136 Methods.

- 102. LANL did not put on **any** evidence that the other methods authorized in the Commission's regulations are somehow inadequate, inaccurate, or not based on good science.
- 103. Instead, LANL made a legal argument, through a non-lawyer, Mr. Toll, that EPA regulations require states to use Part 136 Methods for compliance with federal permits. *See* LANL Ex. 7 at 9-10.
- 104. Mr. Toll's legal analysis is wrong, and his own exhibits demonstrate that states have the authority under the Clean Water Act to select non-Part 136 sampling methods if there is no Part 136 Method that applies.

⁶ 20.6.4.14 SAMPLING AND ANALYSIS:

A. Sampling and analytical techniques shall conform with methods described in the following references unless otherwise specified by the commission pursuant to a petition to amend these standards:

^{(1) &}quot;Guidelines Establishing Test Procedures For The Analysis Of Pollutants Under The Clean Water Act," 40 CFR Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5;

⁽²⁾ Standard Methods For The Examination Of Water And Wastewater, latest edition, American public health association;

⁽³⁾ Methods For Chemical Analysis Of Water And Waste, and other methods published by EPA office of research and development or office of water;

⁽⁴⁾ Techniques Of Water Resource Investigations Of The U.S. Geological Survey;

⁽⁵⁾ Annual Book Of ASTM Standards: volumes 11.01 and 11.02, water (I) and (II), latest edition, ASTM international;

⁽⁶⁾ Federal Register, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations;

⁽⁷⁾ National Handbook Of Recommended Methods For Water-Data Acquisition, latest edition, prepared cooperatively by agencies of the United States government under the sponsorship of the U.S. geological survey; or

⁽⁸⁾ Federal Register, latest methods published for monitoring pursuant to the Safe Drinking Water Act regulations.

105. Mr. Toll argues that federal regulations at 40 CFR § 122.44 limit testing methods to Part 136 methods. Specifically, he claimed that 40 CFR § 122.44(i)(1)(iv) states:

EPA's regulations . . . provide in 40 C.F.R. 122.44 that each NPDES permit includes requirements to monitor compliance with effluent limitations "[a]ccording to *test procedures approved under Part 136* for the analyses of pollutants having approved methods under that part, and according to a test procedure specified in the permit for pollutants with no approved methods."

Toll Dir. Test. at 6, ll. 9-14 (quotations in original and emphasis added by Mr. Toll) [LANL Ex. 7].

- 106. **Mr. Toll misquotes the federal regulations.** *See* 40 CFR § 122.44(i)(1)(iv) [NMED Ex. 112]. The language quoted, bolded, and italicized by Mr. Toll does not appear in 40 CFR § 122.44, as Mr. Toll conceded during cross-examination. 3 Tr. 785:20-25, 787:25
- 107. As a matter of fact, the regulations relied upon by Mr. Toll **expressly** provide the opposite of what Mr. Toll alleges.
 - 108. At 40 CFR § 122.44(i)(1(iv)(B), the federal regulations state:
 - (B) In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters.

NMED Ex. 112 at 7 (emphasis added).

109. A note from the preceding provision, 40 CFR § 122.44(i)(1)(iv)(A)(2), states:

NOTE TO PARAGRAPH (i)(1)(iv)(A): . . . Consistent with 40 CFR part 136, applicants or permittees have the option of providing matrix or sample specific minimum levels rather than the published levels. Further, where an applicant or permittee can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive", the analytical results are not consistent with the QA/QC specifications for that method, then the Director may determine that the method is not performing adequately and the Director should select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.44(i)(1)(iv)(A).

Where no other EPA-approved methods exist, the Director should select a method consistent with 40 CFR 122.44(i)(1)(iv)(B).⁷

Id. (emphasis added).

- 110. These provisions in the federal regulations the same regulations relied upon by Mr. Toll -- make it crystal clear that, if there is no approved Part 136 Method, states have discretion to select another sampling method.
- 111. That states are authorized to use methods other than Part 136 methods is consistent with these same regulations that require a federal permit to include "monitoring necessary" "to attain and maintain applicable water quality standards." 40 CFR § 122.44(d)(1)(C)(3) [NMED Ex. 112 at 4].
- 112. In other words, federal permits must have monitoring methods that can detect whether state water quality standards are being achieved or not. If there is no Part 136 method that can detect whether a standard is being achieved, states have discretion to select a different method.
 - 113. This commonsense proposition is further confirmed by Mr. Toll's exhibits.
- 114. Mr. Toll cites in his rebuttal testimony to EPA's NPDES Permit Writers' Manual, asserting that manual requires permittees to use Part 136 Methods (or ATPs). Toll Reb. Test. at 15, ll. 13-23. [LANL Ex. 63].⁸

⁷ "Director" refers to the Director means the Regional Administrator or the State Director, as the context requires, or an authorized representative. 40 CFR § 122.2.

⁸ Mr. Toll quotes from section 8.1.1 of the manual, which states in part that, "Regulations at §122.44(i) require permittee to monitor . . . using the test methods established at Part 136 unless another method is required under 40 CFR subchapters N or O." Toll Reb. Test. at 15, ll. 15-22 [LANL Ex. 63].

115. However, in the **same chapter** of the manual cited by Mr. Toll, EPA makes it clear that permit writers have discretion to select another sampling method if no Part 136 Method applies:

The standard conditions of the permit . . . require that, when available, permittees use test procedures specified in Part 136. . . . Without analytical methods for a parameter, the permit writer should specify the analytical method to be used. There are also procedures to apply for approved alternative test methods in accordance with § 136.4.

- 3 Tr. 792:20 793:5 [citing EPA NPDES Permit Writers' Manual, § 8.3 (Sept. 2010) (emphasis added)].
- 116. Not only does EPA make it clear that permit writers "should specify the analytical method to be used" if there is no Part 136 Method, but EPA makes it clear that there are **not** only two choices, as Mr. Toll would have the Commission believe a Part 136 Method or an ATP. EPA makes it clear that, in addition to the permit writer specifying a different method than under Part 136, the ATP or alternative test procedure is "also" available. *See id*.
- 117. Finally, Mr. Toll's Exhibit 85, the November 11, 2020 EPA memorandum on PFAS monitoring, recognizes what the federal regulations provide and what the NPDES Permit Writers' Manual provides for and, that is:

Generally, the permitting authority requires the use of methods approved at 40 CFR Part 136 for compliance with such monitoring requirements. If no approved methods are available at 40 CFR, then the permitting authority has discretion to specify the use of suitable methods.

LANL Ex. 85 at 2 (emphasis added).

118. During detailed cross-examination on the federal regulations, the permit writers' manual, and the EPA memorandum, Mr. Toll had no good explanation for the inconsistency between his claim that the federal regulations only allow Part 136 Methods (or an ATP) and all these documents' express language to the contrary. *See* 3 Tr. 783:7 -.797:5.

B. The Consequence of LANL's Proposal Is There Would Be Ineffective Monitoring for PCBs and No Monitoring for PFAS

- 1. <u>LANL objects to using a monitoring method for PCBs that detects at the Commission's standards</u>
- 119. NMED has conditioned both of LANL's federal permits on monitoring for PCBs.
- 120. According to EPA:

PCBs have been demonstrated to cause a variety of adverse health effects. They have been shown to cause cancer in animals as well as a number of serious non-cancer health effects in animals, including: effects on the immune system, reproductive system, nervous system, endocrine system and other health effects. Studies in humans support evidence for potential carcinogenic and non-carcinogenic effects of PCBs. The different health effects of PCBs may be interrelated. Alterations in one system may have significant implications for the other systems of the body.

AB Ex. 11 at 1-2.

- 121. NMED has conditioned both federal permits on LANL using a specific test method, EPA Method 1668C, to test for PCBs. AB Ex. 12 at 5-7; AB Ex. 14 at 4-5.
- 122. LANL objects to using EPA Method 1668C because it is not a Part 136 Method, AB Ex. 11 at 3-4, and insists on using Method 608.3, which is a Part 136 Method.
- 123. While EPA Method 1668C is not a Part 136 Method, it is approved by EPA's Office of Water, *see* AB Ex. 20, and is therefore an authorized method under the Commissions regulations. *See* 20.6.4.14.A(3) NMAC.
- 124. The Commission has set numeric water quality standards for PCBs, and has determined that PCBs are cancer-causing and persistent. 20.6.4.900.J NMAC.
- 125. Amigos Bravos presented two experts with tremendous expertise in monitoring for PCBs, Mr. Hope and Ms. Bailey.
- 126. Mr. Hope, who has decades of experience testing for PCBs, explained in great detail the differences between EPA Method 1168C, testing for congeners, and Method 608.3,

measuring Arochlors. AB Ex. 19 at 3-5. Ms. Bailey, too, who led an environmental consulting firm for decades, explained the differences between these two methods. AB Ex. 22 at 2-4.

- 127. In summary, Method 608, developed in the 1970s, measures Aroclor concentrations. PCB congeners are present in some materials but not as Aroclors, and thus would not be quantitated by Method 608. AB Ex. 22 at 2-3.
- by isotope dilution and internal standard high resolution gas chromatography/high resolution mass spectrometry. Because high resolution mass spectrometry is used as the detector, positive identification is provided for each compound. (The detector used for Method 608.3 cannot provide a positive identification of a compound.) Water samples are extracted in a similar manner as for Method 608.3; however, rather than measuring only a mixture of congeners in seven Aroclors, Method 1668C identifies and quantitates the concentration of each of the **209 PCB congeners** in the sample. *Id.* at 3.

129. The Commission's numeric standards, and a legend, are set forth below:

Pollutant	CAS	DWS	WH	<mark>Aquatic Life</mark>			
	Number			Acute	Chronic	HH-OO	Type
Polychlorinated			0.014		<mark>0.014</mark>	<mark>0.00064</mark>	
Biphenyls (PCBs)	1336-36-3	$0.50\mu g/L$	<mark>μg/L</mark>	2 μg/L	<mark>μg/L</mark>	<mark>μg/L</mark>	C, P

DWS: domestic water supply

WH: wildlife habitat

HH-OO: human health organism only

C: cancer causing

P: persistent

μg/L: micrograms per liter

20.6.4.900.J NMAC; see AB Ex. 19 at 5-6; AB. Ex. 22 at 4-5.

130. The method detection limit for Method 608.3 is 0.065 μ g/L. AB Ex. 19 at 5; AB Ex. 22 at 4.

- 131. The method detection limit for EPA Method 1668C for PCB congeners is 7 77 picograms per liter or 0.000007 0.000077 $\mu g/L$, one to two orders of magnitude lower than the Commission's lowest standard of 0.00064 $\mu g/L$. AB Ex. 19 at 5.
- 132. Method 608.3 is not able to detect PCBs at the Commission's numeric limits for wildlife habitat, aquatic life chronic, or aquatic life human health-organism only while EPA Method 1668C is able to detect PCBs at all of the Commission's numeric limits for PCBs. AB Ex. 19 at 6; AB Ex. 22 at 4-5.
- 133. LANL put on no evidence disputing that Method 608.3 cannot detect at all Commission standards and that EPA Method 1668C can.
- 134. If the Commission adopts LANL's proposal to limit testing to Part 136 Methods, NMED will not be able to ensure that all the Commission's standards for PCBs are met.
- 135. This result would be contrary to the requirements of the Clean Water Act and implementing regulations that require state certifications of federal permits to include monitoring requirements that ensure that discharges meet state water quality standards⁹ and contrary to the Water Quality Act's fundamental goal to prevent and abate water pollution.

2. <u>LANL objects to any monitoring for PFAS</u>

136. As discussed above in Section III.B.3, NMED conditioned both the LANL Wastewater Permit and the Stormwater Permit on monitoring for PFAS, conditions to which LANL objects. Not only does LANL object to monitoring for PFAS, claiming NMED has no authority to require monitoring of PFAS, it also claims NMED cannot require monitoring for PFAS because there is no Part 136 Method for such monitoring. AB Ex. 11 at 3-4.

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⁹ See 33 USC § 1331(d); 40 CFR § 122.44(d)(vi)(C)(3).

- 137. As discussed in detail in Dr. DeWitt's testimony and summarized above in Section IV, at least nine PFAS are "toxic pollutants" under the Commission's definition and many others are CECs, for which according to Dr. DeWitt NMED should have the authority to require monitoring.
- 138. There is no Part 136 Method to monitor for PFAS. Therefore, if LANL's proposal to limit sampling to Part 136 Methods is adopted, there would be no effective way to monitor for these dangerous contaminants.
- 139. EPA, however, has published several test methods for PFAS that are applicable for drinking water and/or surface waters, including EPA Method 537.1: "Determination of selected PFAS in drinking water by SPE and LC/MS/MS" (2018/2020). While EPA Method 537.1 was developed for measuring PFAS in drinking water, it can be modified to be applied to surface waters. AB Ex. 17 at 5-6.
- 140 EPA Method 537.1 is the method that NMED requires LANL to use to monitor for PFAS. AB Ex. 12 at 5-7; AB Ex. 14 at 4-5.
- 141. EPA Method 537.1 is approved by EPA's Office of Research and Development, and therefore an authorized method under the Commissions regulations. *See* 20.6.4.14.A(3) NMAC.
 - 142. LANL put on no evidence that any Part 136 Method can detect PFAS.
- 143. If the Commission adopts LANL's proposal to limit testing to Part 136 Methods, NMED would not be able to require LANL to monitor for PFAS, known toxic pollutants and CECs.
- 144. This result would be contrary to the Water Quality Act's fundamental goal to prevent and abate water pollution.

- VII. THE COMMISSION SHOULD NOT ADOPT A DEFINITION OF "EFFLUENT DOMINATED" AT 20.6.4.7.E(2) NMAC AND SHOULD ADOPT NMED'S DEFINITON OF "BASEFLOW" AT 20.6.4.7.B(1) NMAC WITH AMIGOS BRAVOS' UNOPPOSED AMENDMENT
- 145. NMED proposes adding a definition of "baseflow" at 20.6.4.7.B(1) NMAC and "effluent dominated" at 20.6.4.7.E(2) NMAC.
- 146. Amigos Bravos has proposed an amendment to the definition of "baseflow" **to which NMED does not object** and opposes adding a definition of "effluent dominated." AB

 Ex. 3 at 11-13.
- 147. The amendment to the definition of "baseflow" to which NMED does not object replaces the term "effluent dominated" to "some":

20.6.4.7 DEFINITIONS

. .

B. Terms beginning with the letter "B".

- (1) "Baseflow" refers to the sustained flow volume of a stream or river. In natural systems, baseflow is comprised from regional groundwater inflow and local shallow subsurface inflow that is temporarily stored in the watershed during snowmelt and rain events and slowly released to the stream or river over time. In some effluent dominated systems, baseflow is comprised predominantly from effluent with limited subsurface contributions. Baseflow in both scenarios is critical for sustaining flow in streams and rivers over seasonal and longer timeframes.
- 148. Amigos Bravos objects to introducing the term "effluent dominated" because creating a definition of "effluent dominated" could represent the first step in setting up a framework in which waters that are fed with effluent may be considered less worthy of protection than other waters. AB Ex. 3 at 11.

¹⁰ NMED proposes that "effluent dominated" be defined as "a water that has, over a 12-month average, more than three-quarters of its baseflow attributed to discharges from a permitted effluent discharge. Waters that are effluent dominated are of significant value by providing aquatic life and wildlife habitat." NMED Ex. 110 at 3.

- 149. All waters in New Mexico are a critically important water resource, and it is counterproductive to start down the road of setting up a two-tier system designating a lower class of waters that may receive fewer protections in the future. *Id*.
- 150. According to the latest report from the Office of the State Engineer, surface water accounts for 30.76% of all withdrawals for public water supply use and 21.43% for commercial use. *Id.*
- 151. In New Mexico, much of this water will go to wastewater treatment facilities that will then discharge waters that help sustain perennial flows in smaller stream systems. *Id*.
- 152. As NMED recognizes in its proposed definition of "effluent dominated" and as Secretary James Kenney outlined in NMED's comments to EPA and the U.S. Army Corps of Engineers in their proposed rulemaking defining "waters of the U.S.": waters that are fed by effluent "provide critical wildlife and aquatic habitat, and in some cases create wetlands, and help recharge aquifers for future use." *Id.* at 11-12.
- 153. Effluent dominated waters should not be to be singled out for potential treatment as less deserving of protection than the same water that was originally diverted for public and commercial use. *Id.* at 12.
- 154. Amigos Bravos' concern with singling out effluent dominated/dependent waters stems from Ms. Conn's experience with a 2006 West-wide stakeholder process sponsored by EPA where stakeholders met on multiple occasions and reviewed and discussed EPA "strawman" documents on effluent dependent waters. *Id.* at 12.
- 155. At the time, EPA was considering allowing lower standards for these waters due to pressure from industrial stakeholders. Pushing for less protective standards, these industry stakeholders were effectively threatening to stop discharging if standards weren't lowered,

arguing that any water is a benefit in the arid West even it if is dirty water. These stakeholders appeared to be using the need for water supply as leverage to obtain less protective requirements for their discharges. *Id.; see also* AB Ex. 7 (Dec. 19, 2006 ltr. from Amigos Bravos to EPA outline concerns with industry proposal to weaken water quality standards for effluent dependent waters).

- 156. Ultimately, EPA abandoned this ill-conceived effort. AB Ex. 3 at 12.
- 157. A definition of "effluent dominated" is not needed in the Commission's regulations, and should not be added. AB Ex. 3 at 12.
- XIII. AMIGOS BRAVOS SUPPORTS NMED'S PROPOSAL TO UPGRADE FIVE WATERS FROM SECONDARY TO PRIMARY CONTACT, BUT NMED ERRED BY NOT EXAMINING ALL NON-101(a)(2) WATERS AND BY CONDUCTING AN INCOMPLETE ANALYSIS ON SECONDARY CONTACT WATERS
 - A. NMED Must Examine All Non-101(a)(2) Waters and All Available Data
 During the Triennial Review
- 158. A fundamental requirement for any Triennial Review under Clean Water Act regulations is that **states must** re-examine any waterbody that does not have a section 101(a)(2) use:

The State shall also re-examine any waterbody segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act every 3 years to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State shall revise its standards accordingly.

40 CFR § 131.20(a).

159. According to EPA:

Although EPA interprets the definition of "existing use" to require consideration of the available data and information on both actual use and water quality, all the necessary data may not be available. In these circumstances, a state or tribe may choose, in implementing its water quality standards program, to determine an existing use based on the strength of evidence that a use has actually been achieved or the strength of evidence that water quality

support a use has been achieved. In other words, where data may be limited or inconclusive, EPA expects states and tribes to consider the quantity, quality, and reliability of the different types of available data to describe the existing use as accurate and completely as possible and to resolve any apparent discrepancies based upon that evaluation.

LANL Ex. 32 at 2020 TR LANL-00569 (emphasis added).

- 160. In other words, states must consider all available data when determining existing use.
- 161. New Mexico's "secondary contact" and "limited aquatic life" uses are not section 101(a)(2) "fishable/swimmable" uses. AB Ex. 11 at 13.
- 162. Therefore, all waters with a secondary contact or limited aquatic life use must be re-examined every three years using all available data.

B. <u>Amigos Bravos Supports NMED's Proposal to Upgrade Five Waters from</u> Secondary to Primary Contact

- 163. In preparation for this Triennial Review, NMED analyzed some, but not all waters that currently have the secondary contact use to determine if primary contact is attainable. This analysis, entitled "Existing Use Analysis of Recreational Use for Classified Waters 20.6.4.101-20.6.4.899 NMAC" ("EUA") [NMED Ex. 56], sets forth the process by which NMED examined these waterbodies. AB Ex. 11 at 12-13.
- 164. As a result of this analysis, NMED proposes to upgrade the designated use from secondary contact to primary contact for segments 20.6.4.116, -204, and -207 NMAC and for some, but not all, waters currently found in segments 20.6.4.103, and -206 NMAC. NMED proposes to do this by upgrading the use from secondary to primary contact for segments 20.6.4.116, -204 and -207 NMAC and by moving some of the waters currently in 20.6.4.103 and -207 to two new segments with a primary contact use at 20.6.4.112 and -231 NMAC. *See* NMED Ex. 56.

165. Amigos Bravos supports this proposal and urges the Commission to adopt it.

C. NMED Erred by Failing to Re-examine All Non-101(a)(2) Use Waters

- 166. NMED's EUA study did not re-examine **all** waters with non-101(a)(2) uses. While NMED evaluated nine waters with secondary contact use, NMED did not evaluate waters with a limited aquatic use to determine whether those waters should be upgraded. AB Ex. 11 at 13; *see generally* NMED Ex. 56.
- 167. Waters with limited aquatic use that were not reviewed to determine whether to upgrade that use include segments at 20.6.4.97, -124, -128, 136, and -809 NMAC.
- 168. These additional segments that were not examined consist of many waterbodies. Segment 20.6.4.97 alone includes 25 separate streams. NMED Ex. 9 at 23.
- 169. The Commission therefore should direct NMED to evaluate whether segments at 20.6.4.97, -124, -128, -136, and -809 NMAC should be upgraded to a section 101(a)(2) aquatic use.

D. NMED's Analysis of Secondary Contact Waters Is Incomplete

- 170. NMED's analysis of secondary contact waters is incomplete. As NMED acknowledges in its testimony, during its review it did not evaluate all waters with a secondary contact use: "[1]akes, waterbodies with site specific criteria, and other classified waters undergoing designated use investigations were excluded from the review." NMED Ex. 3 at 7.
- 171. While NMED's EUA study identified nine segments at 20.6.4.103, -116, -124, -204, -206, -207, -213, -219, -308 with secondary contact use, NMED Ex. 56 at 10-12, NMED did not evaluate four additional segments at 20.6.4.97, -126, -128, and -809 with the secondary contact use. *See* NMED Ex. 9 at 23, 29, 30, 47. These segments represent many streams left unexamined. Segment 20.6.4.97 alone includes 25 separate streams; NMED Ex. 9 at 23.

- 172. Furthermore, while the NMED EUA identifies nine segments, only five segments at 20.6.4.103, -116, -204, -206, and -207 NMAC were analyzed. Four segments at 20.6.4.124, -213, -219, and -308 NMAC were excluded from analysis because they did not contain both pH and E. coli data: "Any waterbodies that did not contain both pH and E. coli data were excluded from the analysis and were not included in the proposed recreational use designation change." NMED Ex. 3 at 11. NMED also excluded from analysis waterbodies where data indicated that pH was outside the range for primary contact use. *Id.; see* AB Ex. 11 at 13-14.
- 173. While NMED reviewed certain water quality data, it did not consider other sources of data and information that could demonstrate attainment of uses, such as current or historical records of swimming. In addition, potential restoration or other planned or existing controls could lead to attainment of a section 101(a)(2) use and therefore a detailed examination of total maximum daily loads implementation, watershed based planning efforts, and other best management practices should also be part of the process to determine if section 101(a)(2) uses are attainable. AB Ex. 11 at 14.
- 174. The sole criterion that NMED used during its examination was whether there is historical or current chemical water quality data that indicates primary contact use attainment. If there wasn't chemical data that showed primary contact use attainment at least at one point since 1975, then NMED determined that attainment wasn't possible. *Id*.
- 175. According to EPA, NMED is required to consider all available data and information when determining existing use. LANL Ex. 32 at 2020 TR LANL-00569.
- 176. NMED did not consider all available data in evaluating existing use for the following segments that carry a secondary contact use designation: 20.6.4.124, -213, -219, and -

308 NMAC and did not consider the following segments that carry a secondary contact use at all: 20.6.4.97, -126, -128, and -809 NMAC

177. The Commission therefore should direct NMED to conduct an adequate examination of waters at segments 20.6.4.97, -124, -126, -128, -213, -219, -308, and -809 NMAC to determine if primary contact use is attainable.

IX. THE COMMISSION SHOULD NOT DOWNGRADE NON-PERENNIAL WATERS BECAUSE NMED DID NOT ADEQUATELY DELINEATE THE BOUNDARIES OF THESE WATERS

- 178. Based on NMED's Use Attainability Analysis [NMED Ex. 59], NMED proposes to move non-perennial waters currently protected in classified segments in 20.6.4.101 to 20.6.4.899 NMAC to the non-classified segment at 20.6.4.98 NMAC for intermittent waters. AB Ex. 11 at 18; *see* NMED Exs. 59, 110.
- 179. Specifically, NMED proposes to amend 20.6.4.108, -115, -206, -208, -209, -215, -220, -307, and -309 NMAC by removing non-perennial waters from these segments and placing them by default (not expressly) into the non-classified protections for non-perennial waters at 20.6.4.98 NMAC. AB Ex. 11 at 18; *see* NMED Ex. 110.
- 180. This proposal represents a downgrading of the aquatic life use from a high quality coldwater, coldwater, or marginal coldwater designated use to a marginal warmwater aquatic life use that applies to 20.6.4.98 NMAC. AB Ex. 11 at 18.
- 181. As an example, NMED proposes the following amendments to 20.6.4.115 NMAC to reflect that this segment applies only to perennial waters and not to non-perennial waters:

20.6.4.115 RIO GRANDE BASIN: [-] The perennial reaches of Rio Vallecitos, [and its] perennial reaches of tributaries to Rio Vallecitos except Hopewell lake, and perennial reaches of Rio del Oso and perennial reaches of El Rito creek above the town of El Rito.

- 182. However, NMED does not define in its proposed changes the boundaries of the non-perennial waters that are being moved from the classified segments to the unclassified segments. 4 Tr. 1184:22 1185:1.
- 183. Moreover, these (undefined) boundaries are likely to change, and could change significantly, as a result of climate change. 4 Tr. 1185:2-19.
- 184. This means these waters' designated uses will be de facto downgraded without NMED undertaking a required use attainability analysis. *Id*.
- 185. With no specific boundaries identified for the waters that are being downgraded, there is no way to know now or in the future the designated uses for these waters. *Id*.
- 186. To downgrade a designated use for certain waters, NMED must define the boundaries of the waters to which the downgrade applies.
- X. THE COMMISSION SHOULD ADOPT NMED'S PROPOSAL TO UPGRADE PROTECTIONS FOR THREE LANL WATERS AND DIRECT NMED TO GIVE LANL INTERMITTENT WATERS THE SAME PROTECTION AS OTHER INTERMITTENT WATERS
- 187. During the 2015 Triennial Review, Amigos Bravos asserted that LANL's intermittent waters were not protected under 20.6.4.128 NMAC consistent with the requirements of the Clean Water Act and proposed amendments to the segment to address this issue. AB Ex. 3 at 15.
- 188. As a result of Amigos Bravos' advocacy, Amigos Bravos, NMED, and LANL entered into a Joint Stipulation Regarding Proposed Changes to 20.6.4.128 NMAC on October 9, 2015. *Id*.
- 189. In that stipulation, Amigos Bravos agreed to withdraw its proposed amendments in exchange for an agreement from NMED and LANL to engage in a process to review the protections set forth in 20.6.4.128 NMAC and assess which waters should be included in that

segment with the goal of reaching agreement on protections for LANL waters consistent with the Clean Water Act. *Id.*

- 190. Over the past five years, the parties have met and conducted field studies to determine the appropriate level of protections for LANL waters.
- 191. As a result of this work, NMED proposes a new segment at 20.6.4.140 NMAC to protect three intermittent waters on LANL property: Effluent Canyon from Mortandad Canyon to its headwaters, intermittent portions of S-Site Canyon from monitoring well MSC 16-06293 to Martin Spring, and intermittent portions of Two Mile Canyon from its confluence with Pajarito Canyon to Upper Two Mile Canyon. NMED Ex. 110 at 32.
 - 192. These intermittent waters are currently classified at 20.6.4.128 NMAC.
- 193. Amigos Bravos supports NMED's proposal, which would upgrade these waters' use from limited aquatic life to marginal warmwater aquatic life. *Compare* 20.6.4.128 NMAC *with* proposed 20.6.4.140 NMAC.
- 194. Since the last Triennial Review, 47 Hydrology Protocols were conducted jointly by NMED, LANL, and in some instances Amigos Bravos on waters currently protected under Segment 20.6.4.128 NMAC. Of the 47, five stretches keyed out to perennial and 21 as intermittent. Macroinvertebrates were found in at least 11 of the 47 streams stretches. AB Ex. 11 at 25; AB. Ex. 16.
- 195. Yet NMED only proposes to upgrade three streams from Segment 20.6.4.128 NMAC to the new Segment 20.6.4.140 NMAC. NM Ex. 110 at 32.
- 196. The Commission should direct NMED to immediately take action to propose upgraded protections for additional LANL intermittent streams. Specifically, LANL intermittent waters should be afforded the same protections as other intermittent waters in the state, that is, all

LANL non perennial waters should be protected as intermittent in new segment 20.6.4.140 NMAC unless specifically identified as ephemeral waters, in which case they may be protected in segment 20.6.4.128 NMAC.

AMIGOS BRAVOS' PROPOSED CONCLUSIONS OF LAW

Climate Change

- 1. Amigos Bravos proposes the following amendment to NMED's proposed definition of "climate change":
 - C. Terms beginning with the letter "C".

. . .

(4) "Climate change" refers to any significant change in the measures of climate lasting for an extended period of time, typically decades or longer, and includes major changes in temperature, precipitation, wind patterns or other weather-related effects. Climate change may be due to natural processes or human-caused changes of the atmosphere, or a combination of the two. Humans are largely responsible for recent climate change.

AB Ex. 24 at 2.

- 2. NMED's proposed definition implies that the causes of climate change natural processes and human activities are equivalent. This is not accurate and is misleading.
- 3. The overwhelming scientific consensus is that climate change is primarily human caused.
- 4. Accordingly, a preponderance of the evidence supports adopting Amigos Bravos' proposed amendment to NMED's proposed definition of "climate change" that acknowledges that humans are largely responsible for climate change.

Monitoring for CECs

5. The Commission has the legal authority to authorize NMED require dischargers to monitor for CECs in their federal permits.

- 6. Provisions in the Clean Water Act governing state certification of federal permits give states broad authority to impose conditions in EPA-issued permits. *See* 33 USC § 1341(a)(4); 33 USC § 1341(b).
- 7. The act authorizes a certifying state "to review the manner in which the facility or activity [that is discharging] shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated." 33 USC § 1341(a)(4) (emphasis added).
- 8. Certifying states, therefore, have authority under the Clean Water Act to impose their own "limitations or other applicable water quality requirements", which includes state requirements to monitor for suspected contaminants.
- 9. This same section of the Clean Water Act on state certification provides that, "Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements," which includes state requirements to monitor for suspected contaminants. 33 USC § 1341(b) (emphasis added).¹¹

Use of Sampling Methods Other than Part 136 Methods

10. The Commission has the legal authority to authorize NMED to use sampling methods other than Part 136 Methods (or an ATP).

Federal regulations at 40 CFR § 122.44(i)(1(iv)(B) provide:

(B) In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be

¹¹ See also November 11, 2020 EPA memorandum on PFAS monitoring [LANL Ex. 85] (recognizing that "unregulated contaminants, such as PFAS" may be monitored through federal permits).

conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters.

(Emphasis added.)

11. A note from 40 CFR § 122.44(i)(1)(iv)(A)(2) states:

NOTE TO PARAGRAPH (i)(1)(iv)(A): . . . Consistent with 40 CFR part 136, applicants or permittees have the option of providing matrix or sample specific minimum levels rather than the published levels. Further, where an applicant or permittee can demonstrate that, despite a good faith effort to use a method that would otherwise meet the definition of "sufficiently sensitive", the analytical results are not consistent with the QA/QC specifications for that method, then the Director may determine that the method is not performing adequately and the Director should select a different method from the remaining EPA-approved methods that is sufficiently sensitive consistent with 40 CFR 122.44(i)(1)(iv)(A).

Where no other EPA-approved methods exist, the Director should select a method consistent with 40 CFR 122.44(i)(1)(iv)(B).

(Emphasis added.)

- 12. Federal regulations therefore expressly provide that, if there is no approved Part 136 Method, states have authority to select another sampling method.¹²
- 13. The Commission has appropriately exercised its authority at 20.6.4.14.A NMAC by authorizing NMED to use sampling methods in addition to Part 136 Methods.

Nine PFAs Meet the Definition of "Toxic Pollutant"

- 14. Under the Commission's regulations, "toxic pollutant" is defined as:
- "... those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.

¹² See also EPA NPDES Permit Writers' Manual, § 8.3 (Sept. 2010) [3 Tr. 792:20 - 793:5] (stating that when no analytical methods are available, "the permit writer should specify the analytical method to be used"); November 11, 2020 EPA memorandum on monitoring for PFAS [LANL Ex. 85] (EPA recognizes that, "If no approved methods are available at 40 CFR, then the permitting authority has discretion to specify the use of suitable methods.").

20.6.4.7.T(2) NMAC.

- 15. Dr. DeWitt's extensive testimony detailing the toxicological impacts of nine PFAS convincingly established that they are "toxic pollutants" as defined by 20.6.4.7.T(2) NMAC.
- 16. LANL's toxicologist, Ms. Judd, agreed these PFAS meet the Commission's definition.
- 17. The nine PFAS are perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), perfluorohexane sulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluorobutane sulfonate (PFBS), fluorotelomer sulphonic acid 8:2 (8:2 FTS), N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA), N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA), and perfluorooctanesulfonamide (PFOSA or FOSA).

Existing Use Analysis

- 18. Under Clean Water Act regulations, states must re-examine any waterbody that does not have a section 101(a)(2) use every three years. 40 CFR § 131.20(a).
- 19. Additionally, in determining existing use, states must consider all available data on both actual use and water quality. LANL Ex. 32 at 2020 TR LANL-00569.
- 20. In New Mexico, neither secondary contact nor limited aquatic life uses are section 101(a)(2) uses.
- 21. Accordingly, NMED was required to examine all waters with secondary contact and limited aquatic uses for this Triennial Review.
- 22. NMED appropriately determined that the primary contact use is attainable for waters currently found five segments: 20.6.4.103, -116, -204, -206, -207 NMAC.

- 23. NMED erred by failing to examine the following segments to determine whether the limited aquatic life use should be upgraded: segments at 20.6.4.97, 124, -128, -136, and -809 NMAC.
- 24. NMED's EUA of secondary contact waters is incomplete because NMED did not consider all waters with a secondary contact use and did not consider all available data in the waters they did examine.
- 25. NMED did not examine the following segments to determine if the contact use should be upgraded to the primary contact use, which is a 101(a)(2) use: segments 20.6.4.97, -126, -128, and -809.
- 26. NMED did not consider all available data in evaluating existing use for the following segments that carry a secondary contact use designation: 20.6.4.124, --213, 219, and -308 NMAC.
- 27. The Commission therefore should adopt NMED's proposal to upgrade protections for waters in five segments and should direct NMED to conduct an adequate examination of waters at segments 20.6.4.97, -124, -126, -128, -213, -219, -308, and -809 NMAC to determine if the contact use should be upgraded to primary contact and to evaluate whether segments at 20.6.4.97, -124, -128, -136, and -809 NMAC should be upgraded to a section 101(a)(2) aquatic use. .

Non-perennial Waters

28. NMED did not adequately define the boundaries of the non-perennial waters it proposed to remove from segments 20.6.4.108, -115, -206, -208, -209, -215, -220, -307, and -309 NMAC and placing them by default into the non-classified protections for non-perennial waters at 20.6.4.98 NMAC.

- 29. This change represents a downgrading of the aquatic life use from a high quality coldwater, coldwater, or marginal coldwater designated use to a marginal warmwater aquatic life use that applies to 20.6.4.98 NMAC.
- 30. The Commission should direct NMED to define the boundaries of these waters prior to downgrading the aquatic life designated use of these waters.

CONCLUSION

Based on the foregoing, and on the testimony and exhibits presented at the hearing in this matter, Amigos Bravos respectfully requests the Commission to adopt its Proposed Findings of Fact and Conclusions of Law.

Respectfully submitted,

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